left. The knee-jerk was abolished on the left side and was exaggerated on the right side. Both Achilles jerks were absent. The man had a dorsal kyphoscoliosis the result of Pott's disease in his seventeenth year. Dr. De Buck thought that an injury to the right sacro-iliac joint implicating the lumbo-sacral plexus was the most rational diagnosis notwithstanding the bilateral involvement of the extremities.

3. *Contribution to the Localization of the Cervical Cord.*—The results, obtained by the authors, are based on a careful study of the anatomy of the cell groupings in the eight cervical and the first dorsal segments from a normal cord. A case of infiltrating carcinoma of the anterior thorax, axilla and arm, producing a lesion probably equivalent to a resection of the brachial plexus. Animal experiments were also employed. The authors felt justified in formulating the following conclusions. (1) The brachial plexus begins at the upper portion of the 4th cervical segment and terminates at the lower portion of the 1st dorsal segment; (2) the antero-internal group of cells does not enter into the formation of the plexus which supplies the muscles of the vertebral column; (3) the phrenic originates above the 4th cervical segment (confirming Dumond, who places it between the 3rd and 4th cervical; (4) the spinal accessory originates in the antero-external group in the 1st and 2nd cervical segments. Its longitudinal extent could not be determined; (5) the supra- and infraspinatus muscles are represented by the intermediary group in the 4th cervical segment; (6) the pectoralis major by the intermediate group in the 5th cervical; (7) the anterior brachial region by the posterior groupings in the 5th cervical; (8) the serratus magnus by the gitudinal extent could not be determined; (5) the supra—and infra- 7th cervical probably supplies the pectoralis minor; (10) the triceps by the posterior groupings in the 7th cervical and the intermediate group in the 8th; (11) the postero-external group in the 8th cervical innervates the posterior surface of the forearm and the short adductor of the thumb; (12) the postero-internal group innervates the anterior region of the forearm; (13) lower in the 8th cervical the posterior and internal groups supply the muscles of the hand; (14) in the 1st dorsal the small lateral group innervates the hand muscles—the more anterior assist in supplying the anterior surface of forearm.

4. *Case of Labyrinthine Vertigo cured by Electricity.*—Patient, a woman aged twenty-nine years suffered from headaches and vertigo for several years. The vertigo increased in severity, became constant and was accompanied by a staggering gait, nausea and vomiting. There was constant tinnitus in the right ear with slight deafness. Acuity of vision was normal but any visual effort was accompanied by great fatigue (ascribed to disorder of accommodation—analogous to the double vision sometimes observed under similar conditions). Curettage of the pharynx, politerization, tympanic massage and finally incision of the membrana tympani had been practised without avail. The "l'aigrette statique" produced at first an amelioration and finally a cessation of symptoms which had existed three and one half years. J. R. Hunt.

MISCELLANY.

A Form of Hereditary Cerebellar Ataxia. Thomas and Roux (Revue de Medicine, No. 9, September, 1901, p. 762).

The patient who forms the subject of this paper belongs to a family which, for two successive generations, have produced five individuals afflicted with the same disease. In all of them, the first symptoms have appeared at about the same time, and have followed the same sequence and have produced the same clinical picture. Clinical summary: woman, forty-seven years old; no previous illness of consequence; at the age of thirty-five the disease first made its appearance with symptoms of pain in the lower left extremity. Locomotion became difficult, spontaneous tremor in the muscles of the lower extremities, and Romberg symptom were present. Patellar reflex retained. Heaviness in movements of upper extremities, muscular sense normal. Immobile facies; speech slow and tremulous. Violent pains in lumbar region. Anesthesia for cold and heat, hyperesthesia to contact and pain in lower extremities. Visual acuity diminished. Pupils normal, nystagmus. Acuity of hearing lessened. Vomiting and nausea after eating. Towards the end of life, legs were immobile, owing to contractions of tendons. Death from pulmonary tuberculosis. Microscopic examination of the central nervous system showed the following: (1) Relative smallness of the cerebro-spinal axis. The cord is especially diminutive, as are the posterior and anterior nerve roots. Great increase of the small nerve fibers which enter into them; (2) partial atrophy of the large cells in the anterior horn. Atrophy and disappearance of the small cells at the base of the anterior horn. Atrophy of Clarke's column. Disappearance of great numbers of the reflex collaterals and of the network of the myelinated fibers of the grey matter of the cord; (3) partial degeneration of the posterior column, localized, firstly, in the column of Burdach, then spreading more and more internally in the dorsal region. In the cervical region it is limited exclusively to the posterior portion of the column of Goll. The disappearance at the level of the nucleus of Goll's column. Partial degeneration of the whole antero-lateral tract, especially marked in the dorsal region. Total degeneration of Gowers' tract. Absence of the direct cerebellar tract, indicated by lack of degeneration in the dorsal region with slight trace in the cervical region; (4) degeneration of the lateral tract of the bulb and atrophy of the corresponding nucleus. Degeneration of the restiform body in its central part, while the peripheral portion is normal. The authors, after a consideration of the subject from the points of view of anatomy, physiology, and pathology, and of classification, conclude as follows: There exists a group of family and hereditary affections in the evolution of which cerebellar symptoms play an important part. The anatomical substratum is to be found in a lesion situated sometimes in the cerebellum, and sometimes in the cerebellar tracts. These cases have in common a general smallness of the neuroaxis. Outside of some clinical and anatomical peculiarities due to the participation of other systems, they differ from each other either by the extent or by the location of the lesion, or by its nature. If, from the anatomical point of view, the most extreme types are not comparable, there are others which have many points of contact between them and which form an intermediary series. SCHWAB.

THE SPINAL CORD OF CHILDREN AND SYRINGOMYELIA. Julius Zappert (Wien. klin. Woch., p. 949, No. 41, 1901).

The object of this study, as stated by the author, is to ascertain whether it is possible, by the examination of large numbers of spinal cords in children, to discover findings which have any relation to the cavity formation in the spinal cords in adults. The concrete question which the author set before him to solve was the discovery of the presence of a hydromyelia in its relation to the peculiarity of the epithelium of the central canal as well as the glia overgrowth, and in addition to follow further Schultze's work on the spinal cord hem-